

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026342**Date Inspected:** 20-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

NDT

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 08882.

Ultrasonic Testing (UT)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG. The weld designations reviewed is as follows:

SEG3019M-244, 248, 252, 254

SEG3019BB-002, 024, 046, 068, 090

SEG3019U-006

SEG3019U-001

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OBG Bay 14

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020*-005 located on deck plate to deck plate of the OBG Segment 14W. The welder is identified as 067572. ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020K-006 located on LD to deck plate diaphragm of the OBG Segment 14W. The welder is identified as 067520. ZPMC Quality Control (QC) is identified as Mr. An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-U4b-FCM-1.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3020AG-002 located on edge plate to deck plate of the OBG Segment 14W. The welder is identified as 037748. ZPMC Quality Control (QC) is identified as An Qing Xiang. The welding variables recorded by QC appeared to comply with WPS-B-P-2214- Tc-U4b-FCM-1.

Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020V-041 located on deck panel diaphragm to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 045280. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020E-001 located floor beam flange to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 066239. ZPMC Quality Control (QC) is identified as Mr. Zhang Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3020W-003 located on deck panel diaphragm to deck panel diaphragm of the OBG Segment 14W. The welder is identified as 067275. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

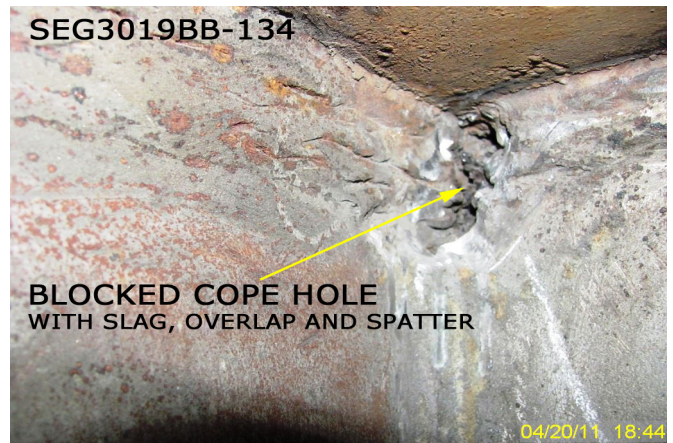
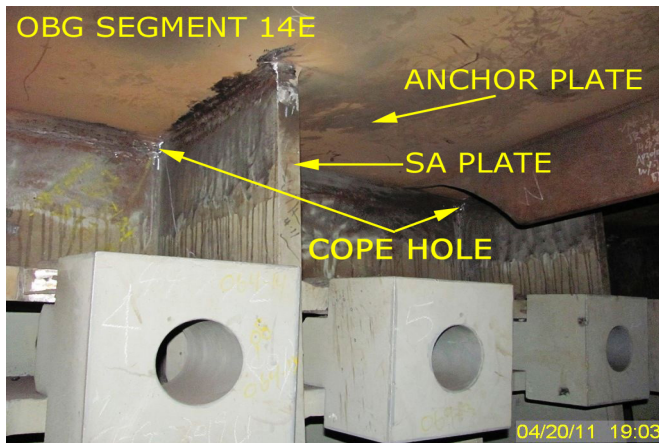
This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as DP3174-001-022 located on deck plate of the OBG Segment 14W. The welder is identified as 067949. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

The following weld did not appear to comply with the applicable contract documents:

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SEG3019BB-134; This QA observed Cope hole weld terminations that did not appear to comply with the contract documents. The non compliant discontinuities (slag, spatter and overlap) were observed at the end of the welds, inside the cope holes. This QA informed to ZPMC Quality Control (QC) indentified as Mr. Lv Li Qing and American Bridge Fluor (ABF) QA identified as Mr. Chi Zheng Hua. For further information, please see the attached pictures below:



Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Singh,Vikram	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
